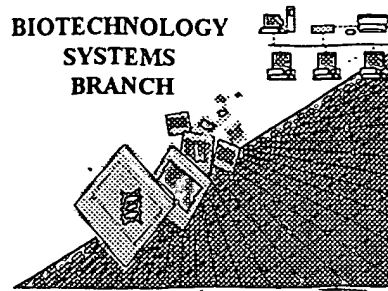


2/5/02

0500

0500

BIOTECHNOLOGY
SYSTEMS
BRANCH



RAW SEQUENCE LISTING
ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/023,909
Source: OPE
Date Processed by STIC: 1/16/2002

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER
VERSION 3.1 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND
TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom, including:

1. EFS-Bio (<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>>, EFS Submission User Manual - ePAVE)

2. U.S. Patent and Trademark Office, Box Sequence, P.O. Box 2327, Arlington, VA 22202

3. Hand Carry directly to:

U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7th Floor, Examiner Name,
Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202

Or

U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two,
2011 South Clark Place, Arlington, VA 22202

4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office,
Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Raw Sequence Listing Error Summary

ERROR DETECTED

SUGGESTED CORRECTION

SERIAL NUMBER: 10/023,909

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1 Wrapped Nucleics
 Wrapped Aminos The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
- 2 Invalid Line Length The rules require that a line not exceed 72 characters in length. This includes white spaces.
- 3 Misaligned Amino
 Numbering The numbering under each 5th amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
- 4 Non-ASCII The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
- 5 Variable Length Sequence(s) contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
- 6 PatentIn 2.0
 "bug" A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) . Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
- 7 Skipped Sequences
 (OLD RULES) Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence:
 (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
 (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)
 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
 This sequence is intentionally skipped

 Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
- 8 Skipped Sequences
 (NEW RULES) Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence.
 <210> sequence id number
 <400> sequence id number
 000
- 9 Use of n's or Xaa's
 (NEW RULES) Use of n's and/or Xaa's have been detected in the Sequence Listing.
 Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.
 In <220> to <223> section, please explain location of n or Xaa; and which residue n or Xaa represents.
- 10 Invalid <213>
 Response Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence
- 11 Use of <220> Sequence(s) 1-27 (and more) missing the <220> "Feature" and associated numeric identifiers and responses.
 Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.
 (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
- 12 PatentIn 2.0
 "bug" Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
- 13 Misuse of n n can only be used to represent a single nucleotide in a nucleic acid sequence. N is not used to represent any value not specifically a nucleotide.

OIKE

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/023,909

DATE: 01/16/2002
TIME: 18:30:53

Input Set : A:\C1039-7058.txt
Output Set: N:\CRF3\01162002\J023909.raw

**Does Not Comply
Corrected Diskette Needed**

pg 1-5

3 <110> APPLICANT: Davis, Heather L.
4 Schorr, Joachim
5 Krieg, Arthur M.
7 <120> TITLE OF INVENTION: Use of Nucleic Acids Containing
8 Unmethylated CpG Dinucleotide as an Adjuvant
10 <130> FILE REFERENCE: C1039/7058/HCL
12 <140> CURRENT APPLICATION NUMBER: US/10/023,909
13 <141> CURRENT FILING DATE: 2001-12-18
15 <150> PRIOR APPLICATION NUMBER: US 09/325,193
16 <151> PRIOR FILING DATE: 1999-06-03
18 <150> PRIOR APPLICATION NUMBER: US 09/154,614
19 <151> PRIOR FILING DATE: 1998-09-16
21 <150> PRIOR APPLICATION NUMBER: PCT/US98/04703
22 <151> PRIOR FILING DATE: 1998-03-10
24 <150> PRIOR APPLICATION NUMBER: US 60/040,376
25 <151> PRIOR FILING DATE: 1997-03-10
27 <160> NUMBER OF SEQ ID NOS: 98
29 <170> SOFTWARE: FastSEQ for Windows Version 3.0
31 <210> SEQ ID NO: 1
32 <211> LENGTH: 15
33 <212> TYPE: DNA
34 <213> ORGANISM: Artificial Sequence
W--> 36 <220> FEATURE:
W--> 36 <223> OTHER INFORMATION:
36 <400> SEQUENCE: 1
37 gctagacgtt agcgt
39 <210> SEQ ID NO: 2
40 <211> LENGTH: 15
41 <212> TYPE: DNA
42 <213> ORGANISM: Artificial Sequence
W--> 44 <220> FEATURE:
W--> 44 <223> OTHER INFORMATION:
44 <400> SEQUENCE: 2
45 gctagatgtt agcgt
47 <210> SEQ ID NO: 3
48 <211> LENGTH: 15
49 <212> TYPE: DNA
50 <213> ORGANISM: Artificial Sequence
52 <220> FEATURE:
53 <221> NAME/KEY: modified_base
54 <222> LOCATION: (7)...(7)
55 <223> OTHER INFORMATION: m5c
57 <400> SEQUENCE: 3
58 gctagacgtt agcgt
60 <210> SEQ ID NO: 4
61 <211> LENGTH: 15
62 <212> TYPE: DNA

(global error)

see item 11 on Error Summary Sheet

15

15

15

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/023,909

DATE: 01/16/2002
TIME: 18:30:53

Input Set : A:\C1039-7058.txt
Output Set: N:\CRF3\01162002\J023909.raw

```

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65 <220> FEATURE:
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68 <223> OTHER INFORMATION: m5c
70 <400> SEQUENCE: 4
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73 <210> SEQ ID NO: 5
74 <211> LENGTH: 15
75 <212> TYPE: DNA
76 <213> ORGANISM: Artificial Sequence
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W--> 78 <223> OTHER INFORMATION:
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79 gcatgacggtt gagct                                     15
81 <210> SEQ ID NO: 6
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83 <212> TYPE: DNA
84 <213> ORGANISM: Artificial Sequence
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87 atggaaggtc cagcgttctc                                20
89 <210> SEQ ID NO: 7
90 <211> LENGTH: 20
91 <212> TYPE: DNA
92 <213> ORGANISM: Artificial Sequence
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W--> 94 <223> OTHER INFORMATION:
94 <400> SEQUENCE: 7
95 atcgactctc gagcgttctc                                20
97 <210> SEQ ID NO: 8
98 <211> LENGTH: 20
99 <212> TYPE: DNA
100 <213> ORGANISM: Artificial Sequence
102 <220> FEATURE:
103 <221> NAME/KEY: modified_base
104 <222> LOCATION: (3)...(3)
105 <223> OTHER INFORMATION: m5c
107 <400> SEQUENCE: 8
108 atcgactctc gagcgttctc                                20
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111 <211> LENGTH: 20
112 <212> TYPE: DNA
113 <213> ORGANISM: Artificial Sequence
115 <220> FEATURE:
116 <221> NAME/KEY: modified_base
117 <222> LOCATION: (18)...(18)
118 <223> OTHER INFORMATION: m5c

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RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/023,909

DATE: 01/16/2002
TIME: 18:30:53

Input Set : A:\C1039-7058.txt
Output Set: N:\CRF3\01162002\J023909.raw

```

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121 atcgactctc gagcgttctc
123 <210> SEQ ID NO: 10
124 <211> LENGTH: 20
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129 atggaaggctc caacgttctc
131 <210> SEQ ID NO: 11
132 <211> LENGTH: 20
133 <212> TYPE: DNA
134 <213> ORGANISM: Artificial Sequence
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136 <400> SEQUENCE: 11
137 gagaacgctg gaccttccat
139 <210> SEQ ID NO: 12
140 <211> LENGTH: 20
141 <212> TYPE: DNA
142 <213> ORGANISM: Artificial Sequence
W--> 144 <220> FEATURE:
W--> 144 <223> OTHER INFORMATION:
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145 gagaacgctc gaccttccat
147 <210> SEQ ID NO: 13
148 <211> LENGTH: 20
149 <212> TYPE: DNA
150 <213> ORGANISM: Artificial Sequence
W--> 152 <220> FEATURE:
W--> 152 <223> OTHER INFORMATION:
152 <400> SEQUENCE: 13
153 gagaacgctc gaccttcgat
155 <210> SEQ ID NO: 14
156 <211> LENGTH: 20
157 <212> TYPE: DNA
158 <213> ORGANISM: Artificial Sequence
160 <220> FEATURE:
161 <221> NAME/KEY: modified_base
162 <222> LOCATION: (14)...(14)
163 <223> OTHER INFORMATION: m5c
165 <400> SEQUENCE: 14
166 gagaacgctg gaccttccat
168 <210> SEQ ID NO: 15
169 <211> LENGTH: 20
170 <212> TYPE: DNA
171 <213> ORGANISM: Artificial Sequence
W--> 173 <220> FEATURE:

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RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/023,909

DATE: 01/16/2002
TIME: 18:30:53

Input Set : A:\C1039-7058.txt
Output Set: N:\CRF3\01162002\J023909.raw

```

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      174 gagaacgatg gaccttccat
      176 <210> SEQ ID NO: 16
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      178 <212> TYPE: DNA
      179 <213> ORGANISM: Artificial Sequence
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      182 gagaacgctc cagcactgat
      184 <210> SEQ ID NO: 17
      185 <211> LENGTH: 20
      186 <212> TYPE: DNA
      187 <213> ORGANISM: Artificial Sequence
W--> 189 <220> FEATURE:
W--> 189 <223> OTHER INFORMATION:
      189 <400> SEQUENCE: 17
      190 tccatgtcgg tcctgatgct
      192 <210> SEQ ID NO: 18
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      194 <212> TYPE: DNA
      195 <213> ORGANISM: Artificial Sequence
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      199 <222> LOCATION: (12)...(12)
      200 <223> OTHER INFORMATION: m5c
      202 <400> SEQUENCE: 18
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      213 <210> SEQ ID NO: 20
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      215 <212> TYPE: DNA
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      219 tccatgtcgg tcctgctgat
      221 <210> SEQ ID NO: 21
      222 <211> LENGTH: 8
      223 <212> TYPE: DNA
      224 <213> ORGANISM: Artificial Sequence

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RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/023,909

DATE: 01/16/2002
TIME: 18:30:53

Input Set : A:\C1039-7058.txt
Output Set : N:\CRF3\01162002\J023909.raw

```

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      226 <400> SEQUENCE: 21
      227 tcaacggt
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      235 tcagcgct
      237 <210> SEQ ID NO: 23
      238 <211> LENGTH: 8
      239 <212> TYPE: DNA
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      243 tcatcgat
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      246 <211> LENGTH: 8
      247 <212> TYPE: DNA
      248 <213> ORGANISM: Artificial Sequence
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W--> 250 <223> OTHER INFORMATION:
      250 <400> SEQUENCE: 24
      251 tcttcgaa
      253 <210> SEQ ID NO: 25
      254 <211> LENGTH: 7
      255 <212> TYPE: DNA
      256 <213> ORGANISM: Artificial Sequence
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      259 caacggt
      261 <210> SEQ ID NO: 26
      262 <211> LENGTH: 8
      263 <212> TYPE: DNA
      264 <213> ORGANISM: Artificial Sequence
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      269 <210> SEQ ID NO: 27
      270 <211> LENGTH: 8
      271 <212> TYPE: DNA
      272 <213> ORGANISM: Artificial Sequence
W--> 274 <220> FEATURE:

```

↓
The types of errors shown exist throughout
the Sequence Listing. Please check subsequent
sequences for similar errors.

VERIFICATION SUMMARY

DATE: 01/16/2002

PATENT APPLICATION: US/10/023,909

TIME: 18:30:54

Input Set : A:\C1039-7058.txt

Output Set: N:\CRF3\01162002\J023909.raw

L:12 M:270 C: Current Application Number differs, Replaced Application Number
L:36 M:258 W: Mandatory Feature missing, <220> FEATURE:
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L:44 M:258 W: Mandatory Feature missing, <220> FEATURE:
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L:94 M:258 W: Mandatory Feature missing, <220> FEATURE:
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VERIFICATION SUMMARY

PATENT APPLICATION: US/10/023,909

DATE: 01/16/2002

TIME: 18:30:54

Input Set : A:\C1039-7058.txt

Output Set: N:\CRF3\01162002\J023909.raw

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L:305 M:258 W: Mandatory Feature missing, <220> FEATURE:

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